

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 2 of 19

LISTING OF THE CLAIMS

1. (Previously presented) A method of predicting the behavior of a current user of an interactive television service, comprising the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

2. (Original) The method of Claim 1, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity.

3. (Original) The method of Claim 2, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

4. (Previously presented) The method of Claim 3, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 3 of 19

5. (Previously presented) The method of Claim 1, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

6. (Original) The method of Claim 1, wherein the other users are unrelated individual persons.

7. (Original) The method of Claim 1, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

8. (Original) The method of Claim 1, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

9. (Original) The method of Claim 1, further comprising the step of:
periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

10. (Previously presented) The method of Claim 9, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive television service.

11. (Previously presented) The method of Claim 1, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 4 of 19

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

12. (Previously presented) The method of Claim 1, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

13. (Cancelled)

14. (Original) The method of Claim 12, further comprising the step of:
periodically updating the first collection of data to reflect the other users' visits to additional Internet web sites.

15. (Original) The method of Claim 14, wherein the step of periodically updating occurs in real time, during the current user's engagement with the service.

16. (Original) The method of Claim 12, further comprising the step of:
accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the current user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality; and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service.

PATENT

Atty. Dkt. No. SEDN/PRED144
Serial No. 09/928,493

Page 5 of 19

17. (Previously presented) A method of predicting the behavior of a user of an interactive television service, during a particular period of engagement with the interactive television service, comprising:

identifying, by a set top box, activities in which the user participates during the period of engagement, and conditions surrounding each such activity, the activities including viewing interactive television programming;

identifying, by a set top box, the activities of multiple other contemporaneous users of the interactive television service during the same period of engagement, and conditions surrounding such activities;

maintaining, by a set top box, a first collection of data that includes data reflecting both the user's and the other contemporaneous users' cumulative activities identified during the period of engagement, and conditions surrounding such cumulative activities;

determining, by a set top box, from such first collection of data, patterns of behavior exhibited by such user's and the other contemporaneous users' participation in activities during the period of engagement;

incorporating, by a set top box, into the first collection of data, data reflecting such determined patterns of behavior;

comparing, by a set top box, (i) the user's present activities and surrounding conditions and (ii) the cumulative activities and surrounding conditions as reflected in such first collection of data, to identify similarities therebetween;

attributing, by a set top box, to the user a pattern of future behavior based on such similarities and on the previously determined patterns of behavior.

18. (Original) The method of Claim 17, further comprising the step of:

continually updating the first collection of data, to reflect (i) the user's and the other contemporaneous users' participation in additional activities and (ii) the determination of new patterns of behavior based on such participation in additional activities; and

wherein the steps of comparing and attributing are performed, at any given point in time, in conjunction with the updated first collection of data.

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,463

Page 6 of 19

19. (Previously presented) The method of Claim 18, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the user is most likely to participate during the period of engagement with the interactive television service.

20. (Previously presented) The method of Claim 18, wherein the interactive television service is accessed through the Internet, the user's and other contemporaneous users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the types of Internet web sites that the user and the other contemporaneous users have visited, (ii) the content of each type of Internet web site visited, and (iii) the amount of time spent at each type of Internet web site visited.

21. (Original) The method of Claim 20, further comprising the step of:
accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality; and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service.

22. (Previously presented) A method of delivering targeted informational content to a current user of an interactive television service, comprising:

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 7 of 19

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) preferences exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween;

attributing, by a set top box, to the current user a preference profile based on such similarities and on the other users' preferences; and

generating, by a set top box, an ordered list of informational content to be selectively delivered to the current user based on the preference profile.

23. (Original) The method of Claim 22, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity.

24. (Original) The method of Claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

25. (Previously presented) The method of Claim 24, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 8 of 19

26. (Previously presented) The method of Claim 22, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

27. (Original) The method of Claim 22, wherein the other users are unrelated individual persons.

28. (Original) The method of Claim 22, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

29. (Original) The method of Claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

30. (Original) The method of Claim 22, further comprising the step of:
periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

31. (Previously presented) The method of Claim 30, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive television service.

32. (Previously presented) The method of Claim 22, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 9 of 19

wherein the step of attributing a preference profile is based in part on those activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

33. (Previously presented) The method of Claim 22, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

34. (Cancelled)

35. (Previously presented) A computer-readable medium having stored thereon instructions for predicting the behavior of a current user of an interactive television service which, when executed by a processor, cause the processor to perform the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

405438-1

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 10 of 19

36. (Original) The computer-readable medium of Claim 35, wherein the instruction that causes the processor to perform the step of identifying the conditions surrounding each of the current user's activities causes the processor to perform the step of determining the amount of time that the current user participates in each activity.

37. (Original) The computer-readable medium of Claim 36, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

38. (Previously presented) The computer-readable medium of Claim 37, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

39. (Previously presented) The computer-readable medium of Claim 35, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

40. (Original) The computer-readable medium of Claim 35, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

41. (Original) The computer-readable medium of Claim 1, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of:

periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 06/928,493

Page 11 of 19

42. (Previously presented) The computer-readable medium of Claim 41, wherein the instructions that cause the processor to perform the step of periodically updating cause it to do so in real time, during the current user's engagement with the interactive television service.

43. (Previously presented) The computer-readable medium of Claim 35, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

44. (Previously presented) The computer-readable medium of Claim 35, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

45. (Cancelled)

46. (Previously presented) Apparatus for predicting the behavior of a current user of an interactive television service, comprising:

means for identifying each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

405438-1

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 09/928,493

Page 12 of 19

means for accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

means for comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

means for attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior;

a set top box including a content delivery service and a user monitor, the set top box enabling communication between the current user and a head end, the user monitor including the means for identifying, the means for accessing, the means for comparing, and the means for attributing.

47. (Original) The apparatus of Claim 46, wherein the means of identifying the conditions surrounding each of the current user's activities includes means for determining the amount of time that the current user participates in each activity.

48. (Original) The apparatus of Claim 47, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

49. (Previously presented) The apparatus of Claim 48, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

50. (Previously presented) The apparatus of Claim 46, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

405438-1

PATENT

Atty. Dkt. No. SEDN/PRED144
Serial No. 09/028,463
Page 13 of 19

51. (Original) The apparatus of Claim 46, wherein the other users are unrelated individual persons.

52. (Original) The apparatus of Claim 46, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

53. (Original) The apparatus of Claim 46, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

54. (Original) The apparatus of Claim 46, further comprising:
means for periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

55. (Previously presented) The apparatus of Claim 54, wherein the means for periodically updating operates in real time, during the current user's engagement with the interactive television service.

56. (Previously presented) The apparatus of Claim 46, further comprising:
means for accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and
wherein the means for attributing includes means for selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

57. (Previously presented) The apparatus of Claim 46, wherein the interactive television service is accessed through the Internet, the current user's activities and the

PATENT

Atty. Dkt. No. SEDN/PRED144

Serial No. 08/028,483

Page 14 of 19

other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

58. (Cancelled)